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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,033	11/17/2003	Akio Ikeda	137522-1	1032

43248 7590 02/16/2006

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EXAMINER	
BOYKIN, TERRESSA M	
ART UNIT	**PAPER NUMBER**
1711	

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/707,033	IKEDA ET AL.	
	Examiner	Art Unit	
	Terressa M. Boykin	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 November 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3, 6 - 27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3 and 6-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Arguments

Applicant's arguments filed 11-18-05 have been fully considered but they are not persuasive.

With regard to the 112 rejection, a as noted previously, applicants state that such language is stated in [0070] of the specification. No exact language describing *how the adjustment is performed* is stated therein. Note that the paragraph merely states "adjusted". Applicants' assertion that it is the adjustment *before* the transesterification reaction or the polycondensation reaction that appears to be the crux of the invention. albeit asserted as important and necessary to the crux of the invention, there is no statement, no amount, no value no preference in claim 1 with regard to how, what, to what degree, etc. is made. Although preferences have been stated in the specification, no such limitations of any kind have been set forth in the claims. Thus, any adjustment of any kind which directly/indirectly affect the OH concentration would render applicants claims anticipatory.

The rejection is maintained and repeated below for your convenience.

35 U.S.C. 112

Claims 1, 3, 6 - 15, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention., i.e. the phrase "**adjusted *before***".

With regard to applicants' arguments regarding the 112 rejection, applicants allege that the term "adjusting before" is fully defined in the specification in paragraphs 0055, 0060, 0064, 0068 and 0070. However, no such language, (page, paragraph etc.) from the specification has been supplied. The paragraphs to which the applicants' refer do not state such language and may be interpreted otherwise. For example, note paragraph 0060. the paragraph reads "*During the polycondensation* reaction or/and transesterification reaction , the OH group ....is adjusted, in advance,..... This may be interpreted to mean that *within the polycondensation reaction* the OH is adjusted. No exact language describing *how the adjustment is performed* is stated therein.

Response to Applicants arguments regarding the 102 rejection

As stated above, with regard to applicant's arguments regarding the 102 rejection, the arguments do not overcome the rejection. Note that applicants claim 1 remains so broadly defined that it remains anticipated by the prior art even when interpreted in light of the specification.

With regard to the 102 rejection applicants state that the reference does not specifically state that the adjustment of the OH concentration is performed prior or before the being subjected to either the transesterification reaction or the polycondensation reaction. It is conversely noted that the reference does not explicitly state that the concentration is done after the transesterification reaction or the polycondensation reaction. The examiner reminds applicants that the recycling process of a polycarbonate includes the recycling during the processing of

making polycarbonate. The term "waste" is inclusive of polycarbonate that is reused whether from an article, land field or directly from a process reactor as long as it is already formed. Thus, in those terms and as stated previously any such "adjustments" or manipulation of the OH concentration could be viewed as being performed *before* the transesterification or the esterification process since, again, the method is a recycling process and thus may be continuous

Note, for example the recycling process below

if polycarbonate is being recycled, when during the recycling process is the "before step....." in a circular process? It is noted that the "before" is relative to the vintage point.

The rejection is maintained and repeated below for your convenience.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United

Claims 1,3, 6-27 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 5652275 see abstract, cols. 4-6.

The reference discloses a process for the chemical recycling of polycarbonates by catalyzed reaction with diaryl carbonates to oligocarbonates which are crystallized, purified and then polycondensed back to polycarbonates, insoluble constituents optionally being removed before the crystallization step. Specifically, the reference discloses a process for the chemical recycling of thermoplastic aromatic polycarbonates comprising degrading said polycarbonates having molecular weights Mw from 15,000 to 80,000, with diaryl carbonates, in a molar ratio of polycarbonate to diaryl carbonate between 1:0.05 and 1:3.5, at temperatures of 120.degree. C. to 320.degree. C. to oligocarbonates having a Mw from about 500 to 10,000 in the presence of catalysts, in quantities of 0.00005 to 10% by weight, based on the total quantity by weight of polycarbonate to be degraded, and crystallizing the oligocarbonates, purifying them and then polycondensing them back to thermoplastic polycarbonates, the polycondensation of the oligocarbonates to the polycarbonates being carried out at 100.degree. to 400.degree. C.

The reference discloses the recycling polycarbonate prepared from the same components as claimed by applicants. Since the disclosed parameters are expressed differently and thus may be distinct from those claimed, it is incumbent upon applicant(s) to establish that they are in fact different and whether such difference is unobvious. In view of the above, there appears to be no significant difference between the reference and that which is claimed by applicant(s). Any differences not specifically mentioned appear to be conventional. Consequently, the claimed invention

cannot be deemed as novel and accordingly is unpatentable

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 6-27 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2003/0065130 see pages 1- 5, tables 1-3 and claims 1- 13. *Note previous rejection*.

With regard to applicants' arguments regarding the 102 rejection, it is noted that the description of an adjustment or specific step on how/what the adjustment is accomplished in paragraph [0074] of applicants' specification discloses that a terminal regulator is added *during the melting* of the polycarbonate resin waste. Additionally, it is further noted that applicants term "waste" is inclusive of the "recyclate' since applicants process is recycling or continuous. As stated previously, and reiterated by applicants, paragraph [0018] of the reference also notes the polycarbonate "is adjusted in the melt....". Which is again identical to applicants' argument and claims. Note also, with regard to claim 4 etc. that Hansen states in the abstract that the polycarbonate to be adjusted may be in the form of waste, or recyclate, which would

mean that the "adjustment" , *depending upon ones perspective of the continuing process when viewed*, could be considered either before, during or after either the transesterification or the melt polycondensation, i.e. it is in a loop reaction. Lastly, with regard to claim 16 etc. the use of a mixing tank is with no specific characteristics etc. is considered to be anticipated by the art since a mixing tank is used therein.

Consequently, the claimed invention continues to not be deemed as novel and accordingly is unpatentable.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

Please note that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov <http://www.uspto.gov>), from the Office of Public Records and from commercial sources. Applicants may be referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Terressa Boykin, via the receptionist whose telephone number is (703) 308-2351. The examiner can normally be reached on Monday through Friday from 8:00a.m.-5:30 p.m.

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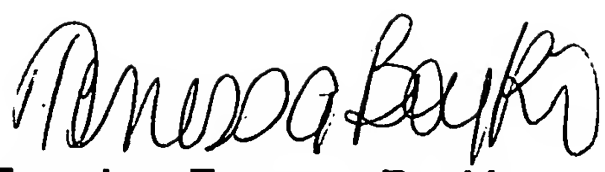

Examiner Terressa Boykin
Primary Examiner
Art Unit 1711